

## New Rules for Solid Waste Incinerators

The Environmental Protection Agency (EPA) has issued new source performance standards and emission guidelines for new and existing "other" solid waste incineration units (OSWI).

The Iowa Department of Natural Resources (DNR) had adopted the federal standards for new OSWI. The DNR must also determine whether Iowa has any existing incinerators subject to the emission guidelines for OSWI. An existing OSWI commenced construction on or before December 9, 2004. A new OSWI commenced construction after December 9, 2004, or commenced modification or reconstruction on or after June 16, 2006.

To meet the federal requirements, and to ensure that all incinerators in the state are in compliance with these regulations, the DNR is asking all owners and operators of waste incinerators to review this information, and notify the DNR by **December 15, 2006**, of their incinerator's status.

### ***What is an "Other Solid Waste Incineration Unit?"***

OSWI systems are defined in the final rule as an incineration unit with a capacity less than 35 tons per day (tpd) burning municipal solid waste or an incineration unit located at an institutional facility burning institutional waste generated at that facility.

- Waste incineration units include field-erected, modular, and custom built units operating with starved or excess air, boilers, furnaces, pyrolysis/combustion units and air curtain incinerators (except those exempt).
- Municipal solid waste (MSW) means refuse (and refuse derived fuel) collected from the general public and from residential, commercial, institutional, and industrial sources consisting of paper, wood, yard wastes, plastics, leather, and non-combustible materials such as metal, glass and rocks.
  - The term MSW does not include industrial processes wastes or medical wastes that are segregated from such other wastes. An incineration unit shall not be considered to be combusting MSW for purposes of this subpart if it combusts a fuel feed stream that is 30 percent or less by weight MSW.
- Institutional waste incinerators are located at institutions (e.g., public or private school; college or university; church or civic organization; fire or police department; town, city, county, State or Federal government; etc.) that burn waste generated at that institution.

### ***How do I know if I am subject to the OSWI rules?***

If you own or operate an incinerator, you may be subject to these new emission guidelines. Please carefully review the federal regulations available at <http://www.epa.gov/ttn/atw/129/oswi/fr16de05.pdf> to determine if the rules apply to you.

Because of the associated expenses of the required emissions testing, emissions monitoring, Title V permitting requirements, and operator training, owners and operators of existing incinerators subject to these requirements may elect to shut down the incinerators.

You may be subject to the OSWI regulations if the incinerator meets the following criteria:

- Incineration units with a capacity less than 35 tons per day burning MSW (very small municipal waste combustors) or an incineration unit located at an institutional facility burning institutional waste generated at that facility.
- Air curtain incinerators that burn less than 35 tons per day of MSW or air curtain incinerators located at institutional facilities burning any amount of institutional waste. Air curtain incinerator means an incineration unit operating by forcefully projecting a curtain of air across an open, integrated combustion chamber (fire box) or open pit or trench (trench burner) in which combustion occurs.

The federal regulations for "new" OSWI are under 40 Code of Federal Regulations (CFR) Part 60 Subpart EEEE, "Standards of Performance for Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004 or for Which Modification or Reconstruction is Commenced on or After June 16, 2006." The DNR has adopted these regulations by reference into the state air quality rules.

The federal regulations for "existing" OSWI are under 40 CFR Part 60 Subpart FFFF, "Emission Guidelines and Compliance Times for Other Solid Waste Incineration Units That Commenced Construction On or Before December 9, 2004." If there are any existing OSWI located in Iowa, the DNR is required to prepare an emissions inventory and adopt state emission guidelines (state air quality rules) for these units.

The Federal Register notice with the federal OSWI regulations is available at <http://www.epa.gov/ttn/atw/129/oswi/fr16de05.pdf>.

### ***Are there exemptions to the rules?***

There are a number of exemptions to the OSWI requirements. However, even if you meet one of the exemption categories, you should still notify the DNR.

Several of the OSWI exemptions require facilities to apply to the DNR for the specific exemption, or to notify the DNR of eligibility for a specific exemption. Additionally, the DNR must be aware of your facility's status in order to provide the required OSWI emissions inventory to the EPA.

You may qualify to be exempt from the OSWI regulations if your incinerator meets the following criteria (**NOTE:** The descriptions below are simply summaries, and are not inclusive of all exemption criteria and conditions):

- **Rural institutional waste incinerators**
  - Includes units that are located more than 50 miles from the boundary of the nearest Metropolitan Statistical Area defined as an urbanized area of at least 50,000 inhabitants with a total metropolitan population of at least 100,000.
  - Alternative disposal options are not available or economically feasible.
  - **NOTE:** Units wishing to use this exemption must first submit an **application** to the DNR and obtain approval to use the exemption.

- **Small or large municipal waste combustion units**
  - Small municipal waste combustion units burn between 35 and 250 tons per day MSW.
  - Large municipal waste combustion units burn more than 250 tons per day MSW.
  - Is already regulated under separate federal or state standards for small or large municipal waste combustion units.
- **Co-fired combustors**
  - The incineration unit has an enforceable permit limiting the combustion of municipal solid waste to no more than 30 percent of the total fuel input by weight.
  - Note that the facility must submit a notification to the DNR stating that the incinerator qualifies for this exemption.
- **Cogeneration facilities**
- **Commercial and industrial solid waste incineration units (CISWI).** Includes distinct operating units located at a commercial or industrial facility burning waste generated on-site, and are already regulated under separate state or federal regulations for CISWI.
- **Cement kilns.** The kilns must already be regulated under the separate National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Portland Cement Manufacturing Industry.
- **Hazardous waste combustion units.** Includes hazardous waste incinerators and combustors, hazardous waste cement kilns, hazardous waste lightweight aggregate kilns, hazardous waste solid fuel boilers, hazardous waste liquid fuel boilers, and hazardous waste hydrochloric acid production furnaces. The units must already be regulated under separate state or federal regulations for hazardous waste combustion units.
- **Hospital/medical/infectious waste incinerators (HMIWI).** Includes units that combust wastes including but not limited to the following: waste generated in the diagnosis, treatment, or immunization of human beings or animals. In order to use this exemption, the unit must already be regulated under separate state or federal regulations for HMIWI.
- **Institutional boilers and process heaters**
- **Laboratory analysis units**
- **Materials recovery units.** Includes units that combust waste for the primary purpose of recovering metals (e.g. primary and secondary smelters).

- **Pathological waste incineration units** Owners or operators planning to use this exemption must notify the DNR of their eligibility for this exemption. Includes units that combust 90 percent or more by weight of:
  - Pathological waste material consisting of only human or animal remains, anatomical parts, and/or tissue, the bags/containers used to transport the waste material, and animal bedding.
  - Low-level radioactive waste consisting of waste material that contains radioactive nuclides emitting primarily beta or gamma radiation, or both.
  - Chemotherapeutic waste consisting of waste material resulting from the production or use of anti-neoplastic agents used for the purpose of stopping or reversing the growth of malignant cells
- **Small power production facilities.**
- **Temporary-use incinerators and air curtain incinerators used in disaster recovery.** Owners or operators of these units planning to use this exemption must notify the DNR of their eligibility for this exemption.
- **Units that combust contraband or prohibited goods.** Include units owned or operated by a government agency such as police, customs, agricultural inspection, or a similar agency to destroy only illegal or prohibited goods such as illegal drugs, or agricultural food products that cannot be transported into the country or across state lines to prevent biocontamination.
- **Incinerators used for national security.** Includes incineration units used solely during military training field exercises to destroy national security materials integral to the field exercises or units used to incinerate materials as necessary to safeguard national security.

#### ***Will I need an air quality permit to operate an OSWI unit?***

All sources subject to the OSWI regulations must obtain a Title V operating permit. For new units that commence operation after December 16, 2004, a complete Title V permit application must be submitted no later than 12 months after the date the unit commences operation. For more information related to the operating permit program, go to the "Operating Permits" link on our website at [www.iowacleanair.com](http://www.iowacleanair.com).

Unless otherwise exempted, all incinerators constructed in Iowa should have an air construction permit. For more information related to the construction permit program and exemptions from construction permitting, go to the "Construction Permits" link on our website.

#### ***What emissions are regulated from an OSWI?***

The EPA estimates that these regulations will decrease the total pollutant emissions from OSWI for these nine air pollutants: cadmium, mercury, lead, hydrogen chloride, dioxins/furans, carbon monoxide, nitrogen oxides, particulate matter, and sulfur dioxide. The final regulations also establish opacity limits for OSWI units. The emission limits in the regulations are based on levels that can be achieved by installing wet scrubbers. Other emission control technologies could also be used, as long as they meet the required emission limits.

***What do I need to do now?***

The DNR is requesting written notification from the owner or operator of **any** incinerator that may be subject to the OSWI requirements, including units that may qualify for one of the exemptions, and units that have been recently shut down or are scheduled to be shut down.

Notifications should be submitted to Christine Paulson, DNR Air Quality Bureau, 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. Please submit the notification to the DNR by **December 15, 2006.**

Notifications should include the following information:

- 1) Name, address and phone number of the owner or operator of the incineration unit(s);
- 2) A description of the incineration unit(s), including number of units, type of unit(s) (e.g. air curtain, pyrolysis/combustion, etc.) and the types of waste combusted (e.g. municipal, institutional, etc.);
- 3) A statement indicating whether or not the incineration unit(s) qualify for one or more of the OSWI exemptions and how the unit(s) qualify; and
- 4) A statement indicating whether or not the unit(s) have been or will be shut down, and the approximate date that shut down occurred or is scheduled to occur.

Additionally, the DNR requests that the owner or operator of any incinerator that is not certain whether they are subject to these requirements, or simply wants more information about the requirements, to please contact the DNR by phone or e-mail. Contact Christine Paulson at the DNR Air Quality Bureau at 515-242-5154, or by e-mail at [christine.paulson@dnr.state.ia.us](mailto:christine.paulson@dnr.state.ia.us).

An EPA Fact Sheet for the OSWI requirements is available at [http://www.epa.gov/ttn/oarpg/t3/fact\\_sheets/32435oswi\\_fs.html](http://www.epa.gov/ttn/oarpg/t3/fact_sheets/32435oswi_fs.html)

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